

REMARKS

Entry of the foregoing, reexamination and reconsideration of the subject application, as amended, pursuant to and consistent with 37 C.F.R. § 1.112, are respectfully requested in light of the remarks which follow.

I. Claim Amendments

By the foregoing amendments, claim 58 has been amended to recite that the primary medium of step (a) comprises IGF-1 and CNTF. New claim 73, reciting the method of claim 58 wherein the primary medium of step (a) further comprises any one or more of SCF, bFGF, IL-6, sIL-6r and interleukin IL-11, has been added. New claims 74-76, reciting particular embodiments of claim 73, have also been added. In addition, claim 61 has been amended to clarify that the cell line obtained in step(c) is capable of proliferating "in a basal medium in the absence of exogenous trophic factors and cytokines" for at least 50 days.

The amendments to the claims have been made without prejudice or disclaimer to any subject matter canceled or recited herein. Applicants reserve the right to file one or more continuation and/or divisional applications directed to any canceled subject matter. No new matter has been added, and entry of the foregoing amendments of the above-identified application are respectfully requested.

II. Response to Claim Rejections Under 35 U.S.C. § 112 - First Paragraph

Claims 58, 61, 66, 68-69, and 72 have been rejected under 35 U.S.C. § 112, first paragraph, as purportedly lacking enablement.

Specifically, the Examiner has stated that LIF has been found to be indispensable for maintaining the undifferentiated state of chicken blastodermal cells in culture. According to the Examiner, the present specification does not adequately demonstrate that the recited method yields a cell line capable of proliferating in basal medium free of all exogenous trophic factors and cytokines. This rejection is respectfully traversed.

In the Declarations submitted herewith (see the Declaration Under 37 C.F.R. § 1.132 of Dr. Majid Mehtali and the Declaration Under 37 C.F.R. § 1.132 of Dr. Fabienne Guéhenneux), Applicants have shown that the present methods can be used to produce nonadherent chicken embryonic stem cell lines capable of proliferating in a basal medium in the absence of exogenous trophic factors and cytokines. In particular, the results set forth in

the Declarations demonstrate that the methods yield avian cell lines that have an ultrastructure and express cell-surface markers that are characteristic of embryonic stem cells, can self-renew indefinitely *in vitro* as undifferentiated cells, have unlimited regenerative capacity, maintain a stable chromosomal content, and express high levels of telomerase after a long period of time in culture. Example 1 of the Declaration of Dr. Mehtali, for example, shows that a primary medium comprising the trophic factor IGF-1 and the cytokine CNTF is suitable for use in the present invention. Other claimed embodiments are supported in the additional examples set forth in the Declarations.

Accordingly, Applicants submit that the present application fully enables the subject matter of the present claims, and respectfully request reconsideration and withdrawal of this rejection.

III. Claim Rejections Under 35 U.S.C. § 112 - Second Paragraph

At page 7 of the Office Action, claims 58, 61, 66, 68-69, and 72 have been rejected under 35 U.S.C. § 112, second paragraph, as purportedly indefinite for the following reasons:

A. The Examiner has stated that the claims are indefinite for reciting "a primary medium comprising," because it is unclear what other additional components could be included. This aspect of the indefiniteness rejection is respectfully traversed.

The term "comprising" is clearly used in the present claims in the traditional and well-accepted manner, as "a term of art . . . which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim" (see MPEP § 2111.03). A person of ordinary skill in the art would immediately recognize that the primary medium could include any number of additional, unrecited components, such as an aqueous medium or buffer, amino acids, vitamins, antibiotics, etc. (*see, e.g.*, page 21, lines 21-38 of the specification).

C. The Examiner has also stated that claim 61 is indefinite because the conditions under which the cells are "capable of proliferating for 50 days" are not clear.

In response, Applicants have amended claim 61 to clarify the conditions, as indicated above.

Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

CONCLUSION

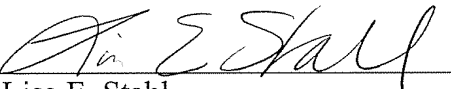
From the foregoing, further and favorable action in the form of a Notice of Allowance is respectfully requested and such action is earnestly solicited.

In the event that there are any questions concerning this amendment or the application in general, the Examiner is respectfully requested to telephone the undersigned so that prosecution of the application may be expedited.

Respectfully submitted,

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